

UNITED STATE. DEPARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 08/943,356 10/01/97 CHARI S MNFRAME.033A EXAMINER LM02/1029 KNOBBE MARTENS NAJJAR, S OLSON & BEAR PAPER NUMBER ART UNIT 620 NEWPORT CENTER DRIVE SIXTEENTH FLOOR 2758 NEWPORT BEACH CA 92660-8016 **DATE MAILED:**

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

10/29/99

t ja San

Office Action Summary

Application No. 08/943,356

Applicant(s)

Chari et al.

Examiner

Saleh Najjar

Group Art Unit 2758



Responsive to communication(s) filed on Aug 24, 1999	·
X This action is FINAL .	
Since this application is in condition for allowance except for formal ma in accordance with the practice under Ex parte Quayle, 1935 C.D. 11;	
A shortened statutory period for response to this action is set to expire is longer, from the mailing date of this communication. Failure to respond application to become abandoned. (35 U.S.C. § 133). Extensions of time 37 CFR 1.136(a).	within the period for response will cause the
Disposition of Claims	
	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
☐ Claim(s)	is/are allowed.
	is/are rejected.
☐ Claim(s)	is/are objected to.
☐ Claims are s	ubject to restriction or election requirement.
Application Papers	
☐ See the attached Notice of Draftsperson's Patent Drawing Review, I	PTO-948.
☐ The drawing(s) filed on is/are objected to by the	ne Examiner.
X The proposed drawing correction, filed onAug 17, 1999 is	Xapproved □disapproved.
☐ The specification is objected to by the Examiner.	
$\hfill\Box$ The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119	
Acknowledgement is made of a claim for foreign priority under 35 L	J.S.C. § 119(a)-(d).
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priorit	ty documents have been
☐ received.	
received in Application No. (Series Code/Serial Number)	
\square received in this national stage application from the Internation	nal Bureau (PCT Rule 17.2(a)).
Acknowledgement is made of a claim for domestic priority under 35	5 U.S.C. § 119(e).
Attachment(s)	
Notice of References Cited, PTO-892 ■	
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).	
☐ Interview Summary, PTO-413	
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948☐ Notice of Informal Patent Application, PTO-152	
. House of informal Fatent Application, 1 10 102	
SEE OFFICE ACTION ON THE FOLLOW	WING PAGES

- 1. This action is responsive to the amendment filed on August 17, 1999. Claims 1-11, 14, 20, 23, and 26 were amended. Claims 32-38 are newly added. Claims 1-38 are pending examination. Claims 1-38 represent a method directed toward managing computer system alerts.
- 2. A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because the amendment to the specification filed on August 24, 1999 contains numerous changes.

A substitute specification filed under 37 CFR 1.125(a) must only contain subject matter from the original specification and any previously entered amendment under 37 CFR 1.121. If the substitute specification contains additional subject matter not of record, the substitute specification must be filed under 37 CFR 1.125(b) and must be accompanied by: 1) a statement that the substitute specification contains no new matter; and 2) a marked-up copy showing the amendments to be made via the substitute specification relative to the specification at the time the substitute specification is filed.

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-22, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonnell et al., U.S. Patent No. 5,655,081.

Bonnell teaches the invention substantially as claimed including a system for monitoring

and managing computer resources and applications across a distributed computing environment using an intelligent autonomous agent architecture.

As per claim 1, Bonnell teaches the claimed limitation of receiving a plurality of alerts, said alerts providing status information about different components in the computer using manager software system 34 of network management computer system 10 (see fig. 11; col. 9)

allowing the user to selectively disable a display of one or more of said alerts to the user, and recording said status information associated with said disabled alerts in a storage medium using event manager 210 and event repository 206 (see fig. 12; col. 9-12)

Bonnell does not explicitly state the limitation of an alert. However, Bonnell discloses an event manager that is responsible for keeping a record of various occurrences throughout the computer network including occurrence of alarm conditions and their resolution (see col. 2-7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bonnell by specifying alerts in place of events as taught by Bonnell since the same functionality is achieved.

As per claim 2, Bonnell teaches the claimed limitation of storing whether each of said alerts is disabled or enabled to be displayed to the user in a plurality of variables; using event filter and system agent (see figs. 17-18; col. 12, lines 5-30, col. 13-14).

As to claim 3, storing information about said disabled alerts in said storage medium at a user computer (see fig. 15; col. 10, Bonnell discloses a set of event catalogs 220-224 containing enumerated records regarding event descriptions).

As per claims 4, and 32, Bonnell teaches the claimed limitation of storing at a user computer a recommended course of action associated with one of said alerts, and displaying a recommended course of action associated with said alerts to the user (see fig. 13; col. 2, and 9, Bonnell discloses a set event manager 52 and event cache 212 responsible for keeping records of various occurrences throughout the computer network, such as occurrence of alarm conditions and their resolution).

As to claim 5, generating a user interface which allows a user to select one or more of said alerts to be displayed to the user by providing a description of said alerts (see fig. 13; col. 2,

Bonnell discloses graphical user interface 50 which coordinates the representation and display of alarm conditions).

As per claims 6-7, wherein said user interface enables said selected alerts to be displayed to the user in response to an enable command by the user, or disable said selected alerts from being displayed to the user in response to a disable command by the user (see fig. 22; col. 13, Bonnell discloses a data structure for implementing event filtering at the agent software which passes data regarding certain events to management consoles interested in those events).

As to claims, 8-10, displaying said enabled alerts notification window to the user and displaying the name of a component associated with one of said alerts, wherein said alert notification window is configured to display the recommended course of action associated with one of said alerts (see fig. 13; col. 2, Bonnell discloses graphical user interface 50 which coordinates the representation and display of alarm conditions);

As to claims 11-12, Bonnell teaches the claimed limitation of generating a notification regarding the status of at least one of said components in a computer, said notification comprising a first code which contains data about said component, said first code having a first data length, and receiving said notification at a remote computer (see figs. 15, 24, and 25; col. 13-14, Bonnell discloses that an event message is sent from agent software running on a server to the management software running on the management console).

Bonnell further teaches receiving said notification at a remote computer, and transforming said notification into a user-friendly display message comprising a second data length, wherein said second data length is significantly greater than said first data length (see col. 2, Bonnell discloses an object database manager 48 which creates and maintains a database 49 representing all of the resources and applications as objects, as well as information pertaining to the state of those objects, in a form that will be readily useable by a graphical user interface module 50. Graphical user interface 50 is responsible for communicating with display driver software in order to present visual representations of objects on the display of network management computer system 10. Such representations typically take the form of icons for objects. Also, graphical user

interface module 50 coordinates the representation of pop-up windows for command menus and the display of requested or monitored data).

Bonnell does not explicitly state the limitation of a notification. However, Bonnell discloses an event manager that is responsible for keeping a record of various occurrences throughout the computer network including occurrence of alarm conditions and their resolution (see col. 2-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bonnell by specifying notifications in place of reporting of events as taught by Bonnell since the same functionality is achieved.

As per claim 13, Bonnell does not explicitly teach the claimed limitation wherein said computer network performs simple network management protocol SNMP transactions.

However, Bonnell discloses an embodiment which includes an agent, collector, and a management console which uses SNMP traps to send messages concerning monitored resources (see figs. 27a-27b; col. 14-15). Furthermore, using SNMP transactions in a network is notoriously well known in the data communication network art. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bonnell by specifying transactions using SNMP for communications between agent software 36, and manager system software 36. One would be motivated to use SNMP transactions in a network to allow for the remote monitoring and updating of devices in the network and lesson the burden of problem management on the management console.

As to claims 14-17, the rejection of claims 1-13 is fully applied herein. Further, Bonnell does not explicitly teach the claimed limitation wherein said first code contains an index; wherein said status module uses said index to identify said user-friendly display message; wherein said index is predefined by a management information base; wherein said management information associates information about said component with said index; wherein said status module uses said information about said component from said management information base to generate said user-friendly display message.

However, Bonnell discloses a knowledge module parser 44 that is responsible for accessing knowledge module 38 and parsing the information therein for use by knowledge

database manager 46, which in turn creates and maintains database 47 of knowledge that is more readily useable by manager software 34, and event manager 52 that is responsible for keeping records of alarms in the network and their resolution (see fig. 2; col. 2).

The use of an index that points to a base of information is well known in the data processing art and therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bonnell by specifying a index in the event reported to the management console.

As per claims 18-19, Bonnell teaches the claimed limitation of displaying a description of said notification and the recommended course of action associated with one of said alerts (see fig. 13; col. 2, Bonnell discloses graphical user interface 50 which coordinates the representation and display of alarm conditions).

Claims 20-22 do not teach or define any new limitations above claims 1-19 and therefore are rejected for similar reasons.

5. Claims 23-27, and 32-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonnell et al., U.S. Patent No. 5,655,081 in view of Dulman, U.S. Patent No. 5,802,146.

Bonnell teaches the invention substantially as claimed including a system for monitoring and managing computer resources and applications across a distributed computing environment using an intelligent autonomous agent architecture.

As to claims 23-24, and 33, Bonnell teaches a method of displaying a system management user interface comprising the acts of:

providing at least one computer having a plurality of components; generating a plurality of alerts, said alerts associated with the monitoring of status information about said plurality of components (see figs.15, 24, and 25; col. 13-14, Bonnell discloses that an event message is sent from agent software running on a server to the management software running on the management console);

and displaying said alerts on a manager computer system (see fig. 13; col. 2, Bonnell discloses graphical user interface 50 which coordinates the representation and display of alarm

conditions).

Bonnell does not explicitly state the limitation of an alert. However, Bonnell discloses an event manager that is responsible for keeping a record of various occurrences throughout the computer including occurrence of alarm conditions and their resolution (see col. 9-12). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bonnell by specifying the events as taught by Bonnell as alerts since the same functionality is achieved.

Bonnell does not explicitly disclose the claimed limitation of allowing the user to select at least two of said alerts and disabling the display of said selected alerts to the user in response to a single command from the user.

However, Dulman teaches a maintenance operations console for an advanced intelligent network where a user interface is provided at the MOC displaying a graphical window view of alarms where the user can select an alarm view by clicking on a corresponding alarm icon which disables the view of the non-selected alarm icon and provides a description of the selected alarm and allows navigation through a plurality of alarms (see figs. 9a-9h; col. 17-18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bonnell in view of Dulman by specifying a graphical user interface that allows the user to select at least two of said alerts and disabling the display of said selected alerts to the user in response to a single command. One would be motivated to do so to allow a user to easily navigate through the selected alarms and obtain further information regarding the device for which the alarm is registered.

As to claim 25, Bonnel teaches the claimed limitation wherein said alerts are associated with the status of a plurality of components in a plurality of network servers (see col. 7).

As to claims 26, and 27, Bonnell does not explicitly disclose the claimed limitation wherein said act of selecting allows the selection of at least two alerts corresponding to at least two network servers, and wherein the act of displaying organizes a subset of said alerts into a processor group.

However, Dulman teaches a maintenance operations console for an advanced intelligent

network where a user interface is provided at the MOC displaying a graphical window view of alarms associated with a plurality of servers or a processor group where the user can select an alarm view by clicking on a corresponding alarm icon which disables the view of the non-selected alarm icon and provides a description of the selected alarm and allows navigation through a plurality of alarms (see figs. 9a-9h; col. 17-18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bonnell in view of Dulman by specifying a graphical user interface that displays a graphical window view of alarms associated with a plurality of servers or a processor group. One would be motivated to do so to allow a user to easily navigate through the selected alarms and obtain further information regarding the device for which the alarm is registered.

As to claims 34-35, Bonnell does not explicitly disclose the claimed limitation further comprising the act of allowing the user to enable or disable the display of said user friendly display message.

However, Dulman teaches a maintenance operations console for an advanced intelligent network where a user interface is provided at the MOC displaying a graphical window view of alarms associated with a plurality of servers or a processor group where the user can select an alarm view by clicking on a corresponding alarm icon which disables the view of the non-selected alarm icon and provides a description of the selected alarm and allows navigation through a plurality of alarms (see figs. 9a-9h; col. 17-18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bonnell in view of Dulman by specifying a graphical user interface that displays a graphical window view of alarms associated with a plurality of servers or a processor group. One would be motivated to do so to allow a user to easily navigate through the selected alarms and obtain further information regarding the device for which the alarm is registered.

Claims 36-38 do not teach or define any new limitations above claims 23-27, and 32-35 and are rejected for similar reasons

6. Claims 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonnell et

al., in view of Dulman, further in view of Giorgio, U.S. Patent No. 5,761,085.

As per claims 28-31 the rejection of claims 1-27 is fully applied herein. Further, the combination of Bonnell and Dulman do not explicitly teach the claimed limitation wherein one of said alerts relates to the status of a fan, a temperature sensor, a power supply, or a fault isolation unit. However, Giorgio teaches a method for monitoring various parameters such as a fan, a temperature sensor, a power supply, or a fault isolation unit for equipment at network sites (see figs. 1-2; col. 4-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bonnell in view of Giorgio so that various parameters such as a fan, a temperature sensor, a power supply, or a fault isolation unit are monitored. One would be motivated to do so to optimize the working parameters of a network node.

7. Applicant's arguments filed August 24, 1999 have been fully considered but they are not persuasive.

In the remarks, the applicant argues in substance that; **A)** Bonnell does not teach a method which allow a user to selectively disable or enable a display of one or more alerts to the user of the computer; **B)** Bonnell does not disclose storing variables which indicate whether the display of each of the alert notifications to the user is disabled or enabled; **C)** Bonnell does not teach transforming a notification having a first data length into a user-friendly display message comprising a second data length, wherein the second data length is significantly greater than the first data length; **D)** Bonnell teaches away from using SNMP for communication between agent software 36 and manager system software 34; **E)** in Bonnell, the knowledge module parser 44, knowledge module 38, knowledge database manager 46, database 47, manager software 34, and event manager 52 do not perform the same functionality as an index which is used by the claimed invention to identify a user-friendly display message.

In response to A); Bonnell teaches an event manager executing in said processor, said event manager configured to selectively disable a display of one or more of said alerts to the user, said event manager further configured to record said status information associated with said alerts

in a storage medium using event manager 210 and event repository 206, and the event filters specified by the user (see fig. 12; col. 9-12).

Bonnell does not explicitly state the limitation of an alert module. However, Bonnell discloses an event manager that is responsible for keeping a record of various occurrences throughout the computer including occurrence of alarm conditions and their resolution (see col. 9-12). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bonnell by specifying the event manger as taught by Bonnell as an alert module since the same functionality is achieved.

In response to **B**); Bonnell discloses a data structure for implementing event filtering at the agent software which passes data regarding certain events to management consoles interested in those events (see fig. 22; col. 13).

In response to C); Bonnell discloses that an event message is sent from agent software running on a server to the management software running on the management console (see figs. 15, 24, and 25; col. 13-14).

Bonnell discloses an object database manager 48 which creates and maintains a database 49 representing all of the resources and applications as objects, as well as information pertaining to the state of those objects, in a form that will be readily useable by a graphical user interface module 50. Graphical user interface 50 is responsible for communicating with display driver software in order to present visual representations of objects on the display of network management computer system 10. Such representations typically take the form of icons for objects. Also, graphical user interface module 50 coordinates the representation of pop-up windows for command menus and the display of requested or monitored data (see col. 2). It is notoriously well known in the art that object code that represents icons for displaying the notification messages is significantly greater that notification messages.

In response to **D**); Bonnell discloses an embodiment which includes an agent, collector, and a management console which uses SNMP traps to send messages concerning monitored resources (see figs. 27a-27b; col. 14-15). Furthermore, using SNMP transactions in a network is notoriously well known in the data communication network art. Therefore it would have been

obvious to one of ordinary skill in the art at the time of the invention to modify Bonnell by specifying transactions using SNMP for communications between agent software 36, and manager system software 36. One would be motivated to use SNMP transactions in a network to allow for the remote monitoring and updating of devices in the network and lesson the burden of problem management on the management console.

In response to E); The use of an index that points to a base of information is well known in the data processing art and therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bonnell by specifying a index in the event reported to the management console.

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Graf, U.S. Patent No. 5,862,333 teaches a system for managing group of computers by displaying only relevant and redundant alert messages. Poliquin et al., U.S. Patent No. 5,696,486 teaches a method and apparatus for policy based alarm notification in a distributed network management environment. Dev et al., U.S. Patent No. 5,751,933 teaches a system for determining the status of an entity in a computer network. Grace, U.S. Patent No. 5,748,098 teaches event correlation in a computer network. Noble et al., U.S. Patent No. 5,944,782 teaches a event management system for distributed computing environment. Ote et al., U.S. Patent No. 5,815,652 teaches a computer management system.
- 9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saleh Najjar whose telephone number is (703) 308-7613. The examiner can normally be reached on Monday-Friday from 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on (703) 305-4731. The fax phone number for this Group is (703) 308-9052.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.

Saleh Najjar

Examiner Art Unit 2758

ZARNI MAUNG PRIMARY EXAMINER